

# PRINCIPLES OF COMMUNITY- BASED PARTICIPATORY RESEARCH IN ENVIRONMENTAL CHILDHOOD RURAL ASTHMA INTERVENTION

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**Background:** The community groups served by Hawaii's Community Health Centers (CHCs) closely reflect the socio-demographic profile of those adversely affected by asthma in the state of Hawaii.

**Methods:** CDC-funded Childhood Rural Asthma Project, Phase V, coordinated by Hawaii Department of Health and Hawaii Primary Care Association, covered administrative district areas of Koolauloa and Waianae on Oahu, and Kona on Big Island, Hawaii. The total number of 89 children, with previous physician diagnosed asthma (ICD-9 493.00-493.99), were recruited by local CHCs in 2009-2010. The standardized logic program evaluation model based on one-group pre- and post-assessment of longitudinal in-home environmental and educational interventions was used to develop and to measure the program performance and outcome indicators.

**Results:** The data analysis revealed statistically significant change in pre- and post program outcome indicators, including increased competency, knowledge and skills on environmental triggers, clinical symptoms and treatment, and self-management of asthma; and reduced number of asthma symptoms, asthma-related physician and ER visits, and missed school days.

**Conclusions:** Sustainable long-term partnership between local community health organizations and community is a core element of community-based participatory research designed to address current health disparities and also to reduce the burden of childhood asthma in the state of Hawaii.